Asset Classes Utilized by KRS

- **Public Equity** ownership in a company that is publicly traded; this ownership represents claims on current assets and future earnings, only after creditors have been paid
- **Fixed Income** a claim on a set of assets that is marked by a loan; the creditor (lender) is paid streams of cash flows (interest payments) during the life of the contract, in addition to the full principal, which is often paid at maturity
- Real Return an investment with a real return objective aims to earn returns above inflation; this category often includes real assets, or ownership of tangible objects such as property or commodities, but can also include financial assets (inflation-protected fixed income) and related investment strategies
- **Private Equity** ownership in a company that is not publicly traded; because it is not publicly traded, there are often discounts and risks, such as illiquidity
- Real Estate real estate is the ownership of land and any associated properties and buildings
- **Absolute Return** absolute return is an investment strategy aimed at positive, stable returns regardless of the market environment; absolute return investments often include hedge funds, which are private investment pools largely exempt from SEC regulation and have more flexibility in using different financial instruments and strategies than mutual funds

The Business Cycle

Business Cycle Stages

Initial Recovery – economic growth becomes positive following slowdown or recession and business confidence often rebounds

• At this point, short term interest rates are low or possibly still declining, and bond yields act similarly; stock prices begin a strong rebound; inflation is near a bottom

Early Upswing – a period of strong, healthy growth following the initial recovery in which unemployment begins to decline and consumer confidence begins to increase

• Short rates, as well as bond yields, are stable or rising; stock prices continue to rise; inflation begins to rise

Late Upswing – as economic growth gains momentum and the output gap closes, employment approaches full capacity, wages and inflation accelerate, and confidence is very high

- Short rates and bond yields are rising and stocks become more volatile as a market top approaches; inflation is heating up **Slowdown** as interest rates rise in response to inflation, economic growth slows down and business confidence is shaken
- Short rates and bond yields are topping out and possibly declining; stocks begin to decline; inflation is approaching a top

 Recession defined as two straight quarters of negative GDP growth, the economy is now experiencing an output gap and investment and confidence declines
- Short rates and bond yields are declining; stock prices approach a market bottom; disinflation occurs



Public Equity

Public Equity – ownership in a company that is publicly traded; this ownership represents claims on current assets and future earnings, only after creditors have been paid

- Public equity is a way to gain exposure to economic and corporate growth
- Public equity is often broken down by domicile of the companies (US versus non-US), market capitalization (the valuation of the company), and value versus growth (based on ratios such as price-to-earnings or price-to-book value)
- In a diversified portfolio, public equity is a large driver of returns, as well as a large source of volatility
- Public equities perform well in the initial recovery and the early upswing, while becoming more volatile in the late upswing and struggling in a slowdown or recession

Fixed Income

Fixed Income - a claim on a set of assets that is marked by a loan; the creditor (lender) is paid streams of cash flows (interest payments) during the life of the contract, in addition to the full principal, which is often paid at maturity

- In an economic context, fixed income plays a balancing act between providing return via coupon payments from bonds and providing a hedge against deflation or a downturn in the economy
- Interest rate sensitive bonds such as U.S. Treasury issued or related bonds do well when
 interest rates are peaking and then falling and do poorly when interest rates are rising,
 especially if interest rates are rising do to an increase in future inflation expectations
- Credit oriented fixed income, such as corporate issued bonds, do well when the economy is rising because default risk is declining and do poorly when the economy is contracting because actual defaults or expected defaults in corporate bonds are increasing
- In the portfolio, fixed income generally has a much lower volatility than equity-related securities and provide a volatility dampening effect on the overall KRS portfolio, but with that lower volatility comes a lower expected return than equities can provide

Absolute Return

Absolute Return – absolute return is an investment strategy aimed at positive, stable returns regardless of the market environment; absolute return investments often include hedge funds, which are private investment pools largely exempt from SEC regulation and have more flexibility in using different financial instruments and strategies than mutual funds

- Absolute return strategies should generate positive returns independent of economic and market conditions
- Different strategies within absolute return will necessarily have different correlations to the
 various stages of the economic cycle. For instance, trading-oriented distressed debt should
 perform well at the tail end of a recession into the initial recovery period whereas long-short
 equity funds may perform better into the bulk of the expansionary phase. Further, CTAs or
 global macro funds may generate positive returns in the worst part of an economic recession
 or market contraction.
- A portfolio of absolute return strategies should generate positive returns in any part of the business cycle, offer low correlations with public equity and fixed income markets, and bring down the overall KRS portfolio level of risk.

Real Return

Real Return – an investment with a real return objective aims to earn returns above inflation; this category often includes real assets, or ownership of tangible objects such as property (real estate) or commodities, but can also include financial assets (inflation-protected fixed income) and related investment strategies

- In the business cycle, most real return strategies perform the best in periods of high inflation, which tends to peak in the late upswing portion of an economic expansion, but can be positive even in recessions, an economic condition known as stagflation
- Some strategies, such as inflation-protected fixed income, can generate strong performance in recessionary/deflationary periods as well
- In the portfolio, real return strategies have a stronger relationship to inflation than other asset classes and serve as a strong diversifier with low correlation to traditional fixed income and equities

Private Equity

Private Equity – ownership in a company that is not publicly traded; because it is not publicly traded, there are often discounts and risks, such as illiquidity

- Private equity can be seen as an extension of public equity but seeks a premium to public markets (due to illiquidity and manager expertise)
- Private equity can also provide diversification to public equities through middle market investing and possibly investments in new and budding industries that have not reached public markets yet
- Categories of private equity include buyouts, venture capital, and debt-related strategies
- In the portfolio, private equity serves as an additional diversification to public equity, as well
 as a source of additional return and risk; private equity performs similarly to public equity
 throughout the business cycle